

[ˈɪŋ.ɡlɪʃ fə.ˈnet.ɪks ˈjuːn.ɪtʰ ˈfə:]

φων

**The syllable margins
in the material world**

Did you do your
homework?

The syllable in the
material world: which
model?

Words of warning and
encouragement

How we make sounds

(Pulmonic) Consonants:
dimensions of
articulation

Which English
consonants do *you* find
difficult?

You can make any
consonant you want

We are mammals and
have mammalian reflexes

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English Phonetics: Unit 4:

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[lə kʌs.tɪ.di kɑ.tɔʊz bɹy.mɛ:ɪ ã dø.sã.tʃãt.katʌ]

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le quartidi 14 brumaire an CCXXXIV

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['tju:z.deɪ ðə 'fɔ:θ _ əv nə(v). 'vem.bə 'twɛnt.i. 'twɛnt.i. 'faɪv]

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(Tuesday 04 November 2025)

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Slides for the session of

Practical English Phonetics (British) /

Phonetics with Listening Practice (British)

held on

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(04 November 2025)

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{ English Department | LangSciTech }
Saarland University

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- or:

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- or:
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- or something in-between.

Dedication (1)

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Image source: Obituary for John C. (Ian) Catford <https://www.legacy.com/obituaries/>

John Cunnison (Ian) CATFORD
26.03.1917–06.10.2009

Dedication (2)



Image source: Jacket design by David Rowley, from: Richard Dawkins: The Ancestor's Tale. London:

Weidenfeld and Nicolson, 2004. Image flipped L-R for phonetic reasons.

The animal that we (and mice, and elephants, and whales, ...) were before that asteroid gave us our big chance. Note that we had a dorsal surface above and a ventral surface below. In describing the tongue, we use the same terms: dorsal and ventral. In this picture, where is “anterodorsal”? and where is “posterodorsal”?

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Places of articulation

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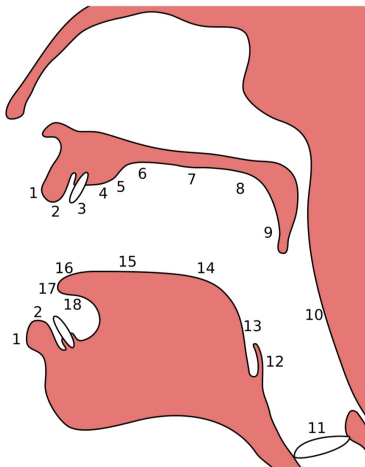


Image: https://commons.wikimedia.org/wiki/File:Places_of_articulation.svg

Pronounce the adjectives that relate to the places of articulation as indicated.

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- Phonologically: **vowels** (typically occur at Nucleus) vs **consonants** (typically occur at margins).
- Phonetically: **vocoids** (unobstructed central airflow through mouth) and **contoids** (all other sounds).

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The syllable in the material world: which model?

- Two possible models of the structure of syllables:
 - ① Initial Margin + Nucleus + Final Margin
 - ② Onset + Rhyme
(Nucleus + Coda)
- In **phonology**, more *interactions* occur between the Nucleus and the Final than between the Initial and the Nucleus.
- At the levels of **phonetics** and **material reality** the simpler model will do:
 - Initial Margin + Nucleus + Final Margin
- Phonologically: **vowels** (typically occur at Nucleus) vs **consonants** (typically occur at margins).
- Phonetically: **vocoids** (unobstructed central airflow through mouth) and **contoids** (all other sounds).
- Nucleus **more sonorant** (=“*sounds*” more) than margins; cf. dt. *Selbstlaute* (vowels), *Mitlaute* (consonants).

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- / s t r e ŋ θ s /

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- / s t r e ŋ θ s /
- [s̥ t̪ ɹ̥ ɛ̝ ŋ̞ k̟ θ̞ s̞]

Words of warning and encouragement (1)

- Phonetics is the only part of language that interfaces with material reality ...

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 - only humans can speak
 - only humans can choke on their food
 - so speaking must be worth the risk

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 - Keep your chart handy: http://www.spence.saar.de/phonetics/unit01_20252/D__IPA_Chart/
 - Only learn as many symbols as you need.
 - You probably already produce way more sounds than you're aware of.

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- Why bother to learn to produce all possible consonant sounds?
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 - **Other first-world Englishes**: (AuE) ['ɹaɪrə] for <writer> *or* <rider>; (Irish) [t̪ʰm] for <thin> vs [tʰm] for <tin>; (Scottish) /r/ realised as [r]; joke-telling(?)

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 - **Third-world Englishes** (retroflex [ɳ t̪ɖ ʂ ʈ ɭ] in Indian English).

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 - **Third-world Englishes** (retroflex [ɳ t̪ɖ ʂ ɻ l ɭ] in Indian English).
 - **Non-native beginners** and **speakers with speech defects**: understanding the 'wrong' sounds they're making.

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The human vocal tract (after Catford)

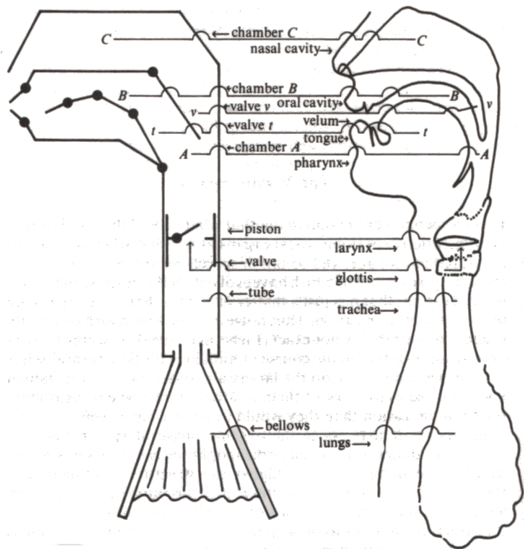


Figure: The vocal tract as a machine

(J.C. Catford, *Fundamental Problems of Phonetics*, Bloomington: Indiana University Press, 1977)

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(Pulmonic) Consonants: dimensions of articulation

- Consonants (contoids) can be looked at in terms of their articulation, their acoustics, or their auditory perception

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- Their articulation can be described in terms of:
 - AIRFLOW (for the moment, we assume ‘pulmonic’)

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- Consonants (contoids) can be looked at in terms of their articulation, their acoustics, or their auditory perception
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 - more delicately: **apico-/apical**-alveolar, **lamino-/laminal**-alveolar, (**antero**)**dorsal**-palatal, (**postero**)**dorsal**-velar, etc.

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 - MANNER of articulation (the “vertical”) dimension
 - plosive, nasal, trill, tap or flap, fricative, lateral fricative, approximant, lateral approximant (make sure you understand what each of these terms means; note Eckert and Barry’s way of classifying these into “obstruents” and “sonorants” [E&B: 36–39]; and don’t forget to add affricate = plosive+fricative)

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- Check out: Glossika Phonics
<https://www.youtube.com/channel/UCFu0FZ0wFoHK2deKf1daLGA>
(for the diagrams; some of the pronunciations are strange...)

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Which English consonants do *you* find difficult?

p			t			k
b			d			g
					tʃ	
					dʒ	
	f	θ		s	ʃ	h
	v	ð		z	ʒ	
m			n			ŋ
			l		r	
w						j

pit			to			cod
bit			do			god
					chin	
					gin	
	fin	thin		sin	shin	hit
	van	the		zoo	vision	
man			not			sing
			lay		ray	
wet						yet

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The most important thing to practise:

obstruents	voiceless plosives	p t k
	voiced plosives	b d g
	voiceless affricates	tʃ
	voiced affricates	dʒ
	voiceless fricatives	f θ s ʃ h
	voiced fricatives	v ð z ʒ
sonorants	voiced approximants	w l ɹ j
	voiced nasals	m n ŋ

← turbulent airflow

← smooth airflow

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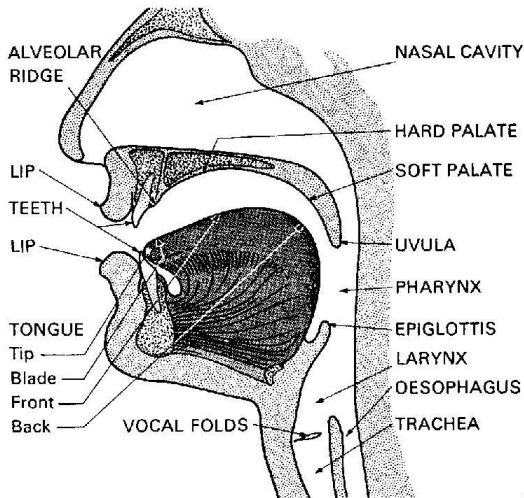
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THE INTERNATIONAL PHONETIC ALPHABET (revised to 2005)

CONSONANTS (PULMONIC)

© 2005 IPA

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b		t d			ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ	n			ɳ	ɲ	ŋ	ɴ		
Trill	ʙ		r						ʀ		
Tap or Flap		ⱱ	ɾ			ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative			ɬ ɮ								
Approximant		ʋ	ɹ			ɻ	j	ɰ			
Lateral approximant			l			ɭ	ʎ	ʟ			

Where symbols appear in pairs, the one to the right represents a voiced consonant. Shaded areas denote articulations judged impossible.

- Keep your copy of the **IPA chart** handy.
- You have received the **description** of a **consonant** sound to produce (**voicing**, and **place** and **manner** of articulation).
- **Read out** the description aloud.
- **Pronounce** the sound.
- Hint: If the sound seems difficult, move **up and down the column** and **back and forth along the row**, until you have situated it in relation to other possible consonants.

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- Use **voicing** as well as **place** and **manner** of articulation to describe the consonant sounds indicated by the framed graphemes or by the framed IPA symbols:

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- Use **voicing** as well as **place** and **manner** of articulation to describe the consonant sounds indicated by the framed graphemes or by the framed IPA symbols:

- < this nation has enough fish to feed itself >

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- < this nation has enough fish to feed itself >

- [m m eməɹi ə v ɔ:l wɪmɪn ɹeɪ p t m ɔ:l w ɔ:z]

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 - < this nation has enough fish to feed itself >
 - [m m eməɪ ə v ɔ:l wɪmɪn ɪr p t m ɔ:l w ɔ:z]
- Read Eckert and Barry pp 36–39 on manner of articulation and on the voiceless/voiced opposition
http:
[//spence.saar.de/phonetics/unit05_20252/B__Handout/](http://spence.saar.de/phonetics/unit05_20252/B__Handout/)

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- < this nation has enough fish to feed itself >

- [m m eməri ə v ɔ:l wɪmɪn ɹeɪ p t m ɔ:l w ɔ:z]

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- We'll follow Eckert and Barry in talking about **fortis** consonants (stronger, like **[p]**) and **lenis** consonants (weaker, like **[b]**)

What are the *other* parts of the tongue doing?

- I was (almost) today years old when I learnt / learned that:

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 - The reason why the Chinese don't mind whether you pronounce 北京 <Beijing> as /beɪ.dʒɪŋ/ or /beɪ.ʒɪŋ/ is that both are wrong. Leaving aside the voiced/voiceless problem,

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 - /beɪ.dʒɪŋ/ gets the MANNER of articulation right: [affricate]

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 - Actually, it's [alveolopalatal] – the tip of the tongue is pointing downward and is touching the oral surface of the bottom front teeth at the gum line.

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 - Actually, it's [alveolopalatal] – the tip of the tongue is pointing downward and is touching the oral surface of the bottom front teeth at the gum line.
 - For years I tried to pronounce 习近平 <Xí Jìnpíng> [ɕiɿ tɕimʌ.pʰɪŋɿ] as a slightly fronted variant of [ɕiɿ tɕimʌ.pʰɪŋɿ], and my Chinese teacher Chen Lansun was never completely satisfied; the place of articulation was wrong – (pre-) palatal [ç], not palatoalveolar [ɕ].

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 - If I had used the older, English-specific Wade-Giles transliteration system <Hsi Chin-P'ing>, I would have got the initial consonant of the articulation of the family name 习 exactly right.

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- And from a student in winter semester 2024/2025 I learnt that

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 - The reason why the Chinese don't mind whether you pronounce 北京 <Beijing> as /beɪ.dʒɪŋ/ or /beɪ.ʒɪŋ/ is that both are wrong. Leaving aside the voiced/voiceless problem,
 - /beɪ.dʒɪŋ/ gets the MANNER of articulation right: [affricate]
 - /beɪ.ʒɪŋ/ gets the PLACE of articulation (almost) right: [palatoalveolar].
 - Actually, it's [alveolopalatal] – the tip of the tongue is pointing downward and is touching the oral surface of the bottom front teeth at the gum line.
 - For years I tried to pronounce 习近平 <Xí Jìnpíng> [ɕɪʌ tɕɪmʌ.pʰɪŋʌ] as a slightly fronted variant of [çɪʌ tçɪmʌ.pʰɪŋʌ], and my Chinese teacher Chen Lansun was never completely satisfied; the place of articulation was wrong – (pre-) palatal [ç], not palatoalveolar [ɕ].
 - If I had used the older, English-specific Wade-Giles transliteration system <Hsi Chin-P'ing>, I would have got the initial consonant of the articulation of the family name 习 exactly right.
- And from a student in winter semester 2024/2025 I learnt that
 - English [ɹ] is produced with the blade of the tongue placed close to the roof of the mouth just behind the alveolar ridge; but the *sides* of the tongue are **raised**, and are in contact with the oral surface of the **upper back teeth** at the gum line.

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What is this baby hominid doing?



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- ... after trying out its lungs ...

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- (If it doesn't, it dies.)

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- (If it doesn't, it dies.)
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- For / i / the oral cavity is short and wide, the lips are spread, the front of the tongue is up, and the back of the tongue is down
- 'Neither / u / nor / i /' is / ə /.
- What is 'both / u / and / i /'?

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